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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/976,536	10/12/2001	Jason T. Griffin	555255-012287	2444

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EXAMINER	
AWAD, AMR A	
ART UNIT	PAPER NUMBER
2675	5

DATE MAILED: 08/27/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/976,536	GRIFFIN ET AL.	
	Examiner	Art Unit	
	Amr Awad	2675	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 October 2001* .

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☐ Claim(s) *1-43* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☐ Claim(s) *1-43* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)☐ The proposed drawing correction filed on _____ is: a)☐ approved b)☐ disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12)☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____ .

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) ☐ The translation of the foreign language provisional application has been received.

15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) *4* .
4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Information Disclosure Statement

1. The references cited in the Information Disclosure Statement filed January 21, 2003 have been considered by the Examiner; see attached PTO-1449.

Specification

2. The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Double Patenting

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

4. Claims 1-43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-48 of U.S. Patent No. 6,278,442 (hereinafter Pat-442) in view of Uchikura (US patent NO. 5,337,346).

By comparing all the independent claims (1, 39, 41-42) with independent claims 1, 15, 39, and 46 of Pat-442; we can see that the claims are fairly similar. For example, claim 1 of both Pat-442 and the present application disclose a hand held device, including keyboard, display, the positive and negative angles, and the oblong shaped keys in claim 1 of Pat-442 are recited in claims 12 and 15, which makes claim 1 of Pat-442 substantially similar to claim 15 of the present application, which is dependent from claims 1 and 12. Non of the claims in Pat-442 recite having microphone and a speaker wherein the microphone is mounted below the display within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing.

However, Uchikura (figures 2-3) teaches a handheld dual-mode mobile (portable phone 1) that includes a keyboard (4), speaker (12 through a hole 17) and microphone (11 through a hole 16) (col. 3, line 57 through col. 4, line 7), and wherein the microphone is mounted below the display (10 through a window 15) within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing (figure 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that the invention described in claim 1 of Pat-442 can be modified to include a speaker and microphone (using Uchikura's teaching) to the device so that the handheld device of claim 1 of Pat-442 can be used as a portable phone and therefore, increasing the versatilities of the device. Similarly with respect the other claims of the present invention.

5. Claims 1-43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-47 of U.S. Patent No. 6,452,588 (hereinafter Pat-588) in view of Uchikura.

Similar to the rejection above, by comparing all the independent claims (1, 39, 41-42) with independent claims 1, 11, 17, 23-24 and 42 of Pat-588, we can see that the claims are substantially similar. For example claim 1 of both Pat-588 and the present application recites a hand-held device that includes a QWERTY keyboard and a display. The positive and negative angles, and the oblong shaped keys in claim 1 of Pat-588 are recited in claims 12 and 15, which makes claim 1 of Pat-588 substantially similar to claim 15 of the present application, which is dependent from claims 1 and 12. Non of the claims in Pat-588 recite having microphone and a speaker wherein the microphone is mounted below the display within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing.

However, Uchikura (figures 2-3) teaches a handheld dual-mode mobile (portable phone 1) that includes a keyboard (4), speaker (12 through a hole 17) and microphone (11 through a hole 16) (col. 3, line 57 through col. 4, line 7), and wherein the microphone is mounted below the display (10 through a window 15) within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing (figure 3).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize that the invention described in claim 1 of Pat-442 can be modified to include a speaker and microphone (using Uchikura's teaching)

to the device so that the handheld device of claim 1 of Pat-588 can be used as a portable phone and therefore, increasing the versatilities of the device. Similarly with respect the other claims of the present invention.

6. Claims 1-43 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-211 of U.S. Patent No. 6,489,950 (hereinafter Pat-950) in view of Uchikura.

The rejection of Pat-588 above, substantially applies to the double patent rejection of Pat-950 in view of Uchikura.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 1-4, 6-7, 30-32, 34-35, 38 and 41-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura.

As to independent claim 1, Uchikura (figures 2-3) teaches a handheld dual-mode mobile (portable phone 1) that includes a housing (1) having a front surface and a rear surface and a plurality of side surfaces coupling the front surface to the rear surface (col. 2, line 66 through col. 3, line 4), a transceiver (col. 3, line 59 through col. 4, line 3 and also shown as element 26 in figure 26), (keyboard (4), speaker (12 through a hole

17) and microphone (11 through a hole 16) (col. 3, line 57 through col. 4, line 7), and wherein the microphone is mounted below the display (10 through a window 15) within the front surface of the device housing and the speaker is mounted above the display within the front surface of the device housing (figure 3).

Uchikura does not expressly teach that the keyboard is a QWERTY keyboard.

However, it is well known in the art that most of the used full keyboard is QWERTY keyboard. Therefore, it would have obvious to a person of ordinary skill in the art at the time the invention was made to realize that the full keyboard taught by Uchikura has a QWERTY layout because such layout is well known in the art and known to most professional keyboard users, and known to facilitate typing.

As to independent claims 39 and 41, the claims are substantially similar to independent claim 1 and would be analyzed as previously discussed with respect to independent claim 1.

As to claim 2, as can be seen in figures 2-3, Uchikura shows that the front surface of the device housing is substantially flat.

As to claim 3, as can be seen from figures 2-3, Uchikura shows that the microphone (16) is mounted within the front surface of the device housing below the keyboard.

As to claim 4, the location of the microphone above the keyboard and below display is not shown clearly in the drawings, and does not show to have a significant over other locations. Therefore, as can be seen in figure 3, Uchikura shows that the microphone is below the display and the keyboard, and having the microphone above of

the keyboard is a matter of a designer choice based on the required characteristics of the device at the design. In other word, changing the location (if not of significant to the device) is not patentable.

As to claim 6, since the vertical reference line in claim 6 is not specified; any vertical line, which offsets from the microphone can read on the claimed limitation.

As to claim 7, as can be seen in figure 3, Uchikura shows that the display (15) is rectangular.

As to claim 30, Uchikura (figure 4) teaches a microprocessor (27) coupled to the transceiver (26), the keyboard (28), the microphone and the speaker, for controlling the operation of the device (col. 4, line 14 through col. 5, line 14).

As to claims 31-32, Uchikura (figure 4) teaches a memory (RAM 31) for storing operating system and one or more application programs that are executed by the microprocessor (27), the one or more programs including at least a voice communication module and data communication module, and a personal information manager application (col. 4, line 14 through col. 5, line 14).

As to claim 34, Uchikura (figure 4) teaches an antenna (22) coupled to the transceiver (26) for communicating with the transmitter and the receiver (col. 4, lines 14-22).

As to claim 35, Uchikura teaches using RF communication (col. 3, lines 45-56).

As to claim 38, Uchikura teaches storing user information in the device (see figure 5 and col. 5, line 51 through col. 6, line 9).

As to independent claim 42, the claim is also similar to claim 1 except that claim 42 further recites "a printed circuit board". Uchikura teaches a printed circuit board (col. 3, lines 59-68).

As to claim 43, Uchikura (figure 4) teaches a transmitter and receiver (26) and antenna (22) within the device housing.

9. Claims 5, 8-19, 23-24, 33, 36-37 and 40 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura in view of Siitonen et al. (US patent NO. 6,049,769; hereinafter referred to as Siitonen).

As to claim 5, Uchikura teaches all the limitations of claim 5 except having the display and the keyboard are not centered along a vertical reference line. Note that in claim 5 the keyboard recited in the claim is not necessarily the same keyboard recited in claim 1, which means that figure 1 of Uchikura fairly, reads on claim 5. Furthermore, Siitonen in figure 2B shows a handheld device that includes display (3), a QWERTY keyboard (8b) wherein the display and the keyboard are centered along vertical reference.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Siitonen to be incorporated to Uchikura, so as to have symmetry between the display and the keyboard, and therefore, make the device user friendly.

As to claim 8, Uchikura does not expressly teach that the QWERTY keyboard includes a plurality of letters keys, a plurality of function keys and space bar key.

However, Siitonen (figure 2B) shows a QWERTY keyboard including a plurality of function keys and space bar key.

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to realize from Siitonen's teaching that the keyboard of Uchikura would include a plurality of letter keys, a plurality of function keys and a space bar key because these keys are necessary to provide a full keyboard functionality.

As to claim 9, as be seen in figure 2B, Siitonen shows function keys, backspace, and enter key and a delete key.

As to claim 10, as can be seen from both references, the keyboard includes all the keys necessary for the key functioning. Having the CAP lock key and the NUM lock key on either side of the space key is a matter of a designer choice.

As to claim 11, figure 2B, of Siitonen reference fairly reads on the claimed limitations of claim 11.

As to claims 12-14, the claim is broad enough because the shape of the keys are not claimed; rather the broad interpretation of the claim is that the location of keys having a negative angle and positive angle with respect the vertical reference line. Such limitation is fairly taught by fig 2B of Siitonen.

As to claim 15, the term "oblong" can be simply translated as " Having the shape of or resembling a rectangle or an ellipse". Therefor, the shape of the keys in figure 2B of Siitonen fairly reads on the limitation of "oblong shaped".

As to claims 16-18, the shape of the keys in Siitonen's figure 2B can be consider as oval like shape, rectangular like shape or diamond shape.

As to claim 19, by comparing figure 2 of the present invention and figure 2B of Siitonen; we can see that the rows of the keyboard, which includes the alphabet letters, are 3 in both figures.

As claim 23, as can be seen in figure 2B, Siitonen shows that keys are symmetrically shaped.

As to claim 24, Uchikura (figure 3) shows that the keys are square shaped.

As to claim 33, Siitonen (figure 1) shows telephone connection (10a) and data input means (8b) (col. 4, lines 26-46), which fairly reads on the cited limitations of the claim. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Siitonen so as to increase the versatility of the device.

As to claim 36, Uchikura teaches wireless voice network and wireless data network (abstract and col. 4, lines 38-46).

As to claim 37, the choice of GSM voice network and data network GPRS is simply well known in the art and would be obvious to use based on the required device.

As to claim 40, the claim is broad enough that FIGS. 2A and 2B of Siitonen show the curved and flat portions.

10. Claim 26 is rejected under 35 U.S.C. 103(a) as being unpatentable over Aldridge et al. (US patent NO. 6,047,047; hereinafter referred to as Aldridge).

As can be seen above, Uchikura teaches all the limitation of claim 26 except the citation of serial port. However, Aldridge (figure 1) teaches a handheld device (30) which includes a serial port (30) (col. 4, lines 28-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include a serial port to Uchikura's device so as to facilitate the communication to other devices and therefore, increase the versatilities of the device.

11. Claims 20-22, 25, and 27-29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Uchikura and Siitonen in view of Grant (US patent NO. 5,500,643 provided by the Applicant).

As to claims 20-22, as can be seen above, Uchikura and Siitonen teach all the limitations of claims 20-22 except the citation of having the keys configured along an arc across the front surface of the device housing.

However, Grant (FIGS. 1-2) shows an input device (10) wherein the keys are configured along an arc across the front surface, and shaped and convex or concave.

Therefor, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Grant having the keys configured in a arc shape to be included in Uchikura's device so as motivated by Grant, to eliminate ulnar-deviation of the actuating hand (abstract).

As to claim 25, as can be seen in figure 1, of Grant's device shows that the keys having circular shape.

As to claims 27-28, as can be seen in figure 1, Grant shows an auxiliary input/output (46) as a thumbwheel (col. 3, lines 64-65).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to include the teaching of Grant having a thumbwheel to Uchikura's device so as to simplify inputting data.

As to claim 29, the LED input/output is broad enough that the LED would have been part of the input/output device which as well known to be existed in the QWERTY keyboard.

Conclusion

12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Chaco (US patent NO. 6,009,333) teaches a telephone communication system having a locator and scheduling facility.

Iwata et al. (US patent NO. 6,535,749) teaches a mobile information terminal equipment and portable electronic apparatus.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Amr Awad whose telephone number is (703)308-8485. The examiner can normally be reached on Monday-Friday, between 9:00AM to 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Saras can be reached on (703)305-9720. The fax phone numbers

for the organization where this application or proceeding is assigned are (703)872-9314 for regular communications and (703)872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4750.

Amr Ahmed Awad

A.A.
August 23, 2003